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World demographic trends

Report of the Secretary-General

Summary

The present report, which has been prepared in accordance with Economic and Social Council resolution 1996/2, reviews demographic trends and prospects worldwide, including for development groups and major areas. It discusses changes in population size and growth, fertility and contraception, mortality, international migration, population ageing and urbanization, including the population policies related to those changes.

Today, the world population is 6.8 billion; it is projected to stand at 9 billion in 2045 if fertility continues to decline in developing countries. Expected population growth varies considerably among countries. High population growth is expected in several developing countries, while the population of developed countries will grow little, if at all. Varying fertility levels are the cause of those differences. Today, 86 countries, including 53 developed countries, have below-replacement fertility, while 42 developing countries, many of which are least developed, have total fertility above 4.0 children per woman.

In most of the world, longevity continues to increase. Life expectancy is estimated at 67.2 years globally, averaging 76.5 years in developed countries and 65.4 years in developing countries. In the least developed countries, two thirds of which are severely affected by the HIV/AIDS epidemic, life expectancy averages a low 54.6 years.

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In future, the population will be older and more urban than it is today. Globally, the number of persons aged 60 or over will almost triple, reaching 2 billion in 2050. In 2008, for the first time in history, the global number of urban dwellers surpassed the number of rural inhabitants. Future population growth will be concentrated mainly in the urban areas of the developing world. By 2050, 70 per cent of the world population will likely be urban.

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I. Introduction

1. The present report provides an overview of demographic trends worldwide, including for major areas, development groups and selected countries. It reviews trends relating to population size and growth; fertility and contraception; mortality; international migration; population ageing, and urbanization. Trends are discussed on the basis of the information contained in *World Population Prospects: The 2006 Revision*[1] and *World Urbanization Prospects: The 2007 Revision*,[2] prepared by the Population Division of the Department of Economic and Social Affairs. Data on contraceptive use are based on the latest information included in the database maintained by the Population Division and published in *World Contraceptive Use 2007*.[3] Estimates of the number of international migrants are derived from *Trends in Total Migrant Stock: The 2008 Revision*.[4] The information on population policies is derived from *World Population Policies 2007*,[5] the biennial survey of population policies prepared by the Population Division. The Population Division started monitoring national population policies after the adoption of the World Population Plan of Action in 1974 and has been carrying out this exercise periodically since then.

II. Population size and growth

2. In July 2009, the world population will stand at 6.8 billion and, according to the medium projection variant, is expected to reach 7 billion in 2012, 8 billion in 2025 and 9 billion in 2045. The increase in the length of the period required for each new billion to be added reflects a declining growth rate. In fact, the global population growth rate peaked in the period from 1965 to 1970 at 2 per cent annually and has been declining since then. For 2005-2010, it was estimated to be 1.17 per cent per year, and it is projected to reach a low 0.36 per cent per year in 2045-2050.

3. Population trends vary markedly at the country level. Developed countries are characterized by low mortality and very low fertility that is not sufficient to ensure the replacement of generations and will therefore eventually result in declining populations. Without gains from international migration, the populations of developed countries would soon be declining. With a projected net migration gain averaging 2.3 million migrants annually, the overall population of such countries is projected to increase slightly, from 1.23 billion in 2009 to a maximum of 1.26 billion in 2031, and to start declining thereafter, to reach 1.25 billion in 2050.

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[1] *World Population Prospects: The 2006 Revision, vol. I, Comprehensive Tables* (United Nations publication, Sales No. E.07.XIII.2); *World Population Prospects: The 2006 Revision*, vol. II, *Sex and Age Distribution of the World Population* (United Nations publication, Sales No. E.07.XIII.3); *World Population Prospects: The 2006 Revision, Comprehensive Dataset* (CD-ROM version) (United Nations publication, Sales No. E.07.XIII.8).

[2] *World Urbanization Prospects: The 2007 Revision, Highlights* (United Nations publication, ESA/P/WP/205), 2008; *World Urbanization Prospects: The 2007 Revision* (CD-ROM version) (POP/DB/WUP/Rev.2007).

[3] United Nations publication, Sales No. E.08.XIII.6.

[4] POP/DB/MIG/Stock/Rev.2008.

[5] United Nations publication, Sales No. E.08.XIII.8.

4. In contrast, the population of the developing countries is growing robustly because their average fertility is still well above replacement level. From 2009 to 2050, their population is projected to increase by 2.3 billion, from 5.6 billion to 7.9 billion (see table 1). The population of the least developed countries, in particular, is expected to double, reaching 1.7 billion in 2050. Those projections are contingent on continued fertility reductions in developing countries, particularly in the least developed countries, where total fertility is projected to drop from 4.6 to 2.5 children per woman between the periods 2005-2010 and 2045-2050. Without further fertility change, the population of the least developed countries could reach 2.8 billion in 2050.

5. The populous countries of Brazil, India, Indonesia, Nigeria and Pakistan are expected to contribute 828 million inhabitants to the world population between 2009 and 2050, with their overall population increasing from 2 billion in 2009 to 2.8 billion in 2050. Were fertility levels in those countries to remain constant at 2000-2005 levels, their population would reach 3.9 billion in 2050. Constant fertility in the less developed regions would produce a population of 10.6 billion in 2050, 2.7 billion more than the estimate produced by the medium variant (7.9 billion). Therefore, in a constant fertility scenario, Brazil, India, Indonesia, Nigeria and Pakistan would account for 70 per cent of the projected population increase in the less developed regions.

Table 1
Population by major area, medium and constant fertility variants, selected years

	Population (millions)					
				2050		
Major area	*1950*	*1990*	*2009*	*Medium variant*	*Constant fertility variant*	*Difference*
World	2 535	5 295	6 828	9 191	11 858	2 666
More developed regions	814	1 149	1 229	1 245	1 218	-27
Less developed regions	1 722	4 146	5 599	7 946	10 639	2 693
Least developed countries	200	525	843	1 742	2 794	1 052
Other less developed countries	1 521	3 620	4 755	6 204	7 845	1 641
Africa	224	637	1 009	1 998	3 251	1 253
Asia	1 411	3 181	4 121	5 266	6 525	1 259
Europe	548	721	731	664	626	-38
Latin America and the Caribbean	168	444	587	769	939	170
Northern America	172	284	345	445	460	15
Oceania	13	27	35	49	57	8

Source: *World Population Prospects: The 2006 Revision*.

6. During the current period, 2005-2010, the world population is increasing by 78 million annually, 75 million of whom are being added to the less developed regions. It has been projected that by 2045-2050, the population of the less developed regions will be increasing by 33 million persons annually, whereas that of the more developed regions will be declining by about 1.3 million a year. Furthermore, whereas in 2005-2010 the annual population increment in the least developed countries accounts for 26 per cent of the increment in the less developed regions, by 2045-2050 that share is expected to rise to 61 per cent.

7. According to the medium variant, the population of 29 countries, most of which are least developed countries, is likely to double between 2009 and 2050. Four countries will gain more than 100 million persons: India, with a projected increase of 455 million; Nigeria, 134 million; Pakistan, 122 million; and the Democratic Republic of the Congo, 120 million. Partly because of the rapid growth expected, more than half of the developing countries consider their population growth to be too high, including two thirds of those in Africa, 56 per cent of those in Oceania and 45 per cent of those in Asia. While in 1986 half of the least developed countries considered their population growth to be too high, by 2005, 80 per cent did so. Thus, developing countries recognize that further reductions in population growth are necessary to ease mounting pressures on the job market, resources and the environment and to facilitate the achievement of all development goals.

8. In contrast, developed countries are concerned about population decline. The populations of 45 such countries are projected to decrease between 2009 and 2050, including in the Russian Federation (by 33 million), Japan (by 25 million), Ukraine (by 15 million), Germany (by 8.4 million) and Poland (by 7.7 million). Population decline and the associated acceleration of population ageing are therefore important concerns for a growing number of countries.

9. In 2009, only 11 countries have more than 100 million inhabitants: China, India, the United States of America, Indonesia, Brazil, Pakistan, Bangladesh, Nigeria, the Russian Federation, Japan and Mexico (listed in order of population size); they account for 61 per cent of the world population. A total of 69 countries with populations ranging from 10 million to 100 million inhabitants account for more than 33 per cent of the world population. The population share of the 73 countries or areas with populations ranging from 1 million to 10 million inhabitants is 5.4 per cent, while the remaining 76 countries or areas, each having fewer than 1 million inhabitants, account for just 0.3 per cent of the world population.

III. Levels and trends in fertility and contraception

10. Global fertility has declined markedly since 1965, from 5.0 children per woman in the period 1965-1970 to 2.6 children per woman in 2005-2010 (see table 2). Since fertility in the more developed regions was a low 2.4 children per woman in 1965-1970, the decline resulted mainly from reductions in developing countries, where fertility dropped from 6.0 to 2.8 children per woman over the period considered.

Table 2
Total fertility for the world and major areas, 1965-1970, 2005-2010 and 2045-2050

Major area	*Total fertility (children per women)*		
	1965-1970	*2005-2010*	*2045-2050*
World	4.9	2.6	2.0
More developed regions	2.4	1.6	1.8
Less developed regions	6.0	2.8	2.1
Least developed countries	6.7	4.6	2.5
Other less developed countries	5.9	2.5	1.9
Africa	6.8	4.7	2.5
Asia	5.7	2.3	1.9
Europe	2.4	1.5	1.8
Latin America and the Caribbean	5.5	2.4	1.9
Northern America	2.6	2.0	1.8
Oceania	3.6	2.3	1.9

Source: World Population Prospects: The 2006 Revision.

11. The onset of the decline in fertility varied by regions (see table 3). It began in the 1960s in Southern Africa, Eastern and Western Asia, the Caribbean and South America, and Micronesia and Polynesia. In Northern Africa, the rest of Asia, Central America and Melanesia, the decline started in the 1970s. In Eastern and Western Africa, fertility showed signs of decline only in the 1980s, and in Middle Africa, there are as yet few signs of decline.

Table 3
Period of maximum total fertility, onset of fertility decline and speed of fertility decline, selected areas

Major area or region	*Period of maximum fertility*	*Maximum fertility (children per woman)*	*Onset of fertility decline*[a]	*Percentage fertility decline within 15 years of onset*	*Fertility in 2005-2010 as percentage of maximum*
World	1950-1955	5.02	1965	27	51
Less developed regions	1950-1955	6.15	1965	31	45
Least developed countries	1960-1965	6.76	1980	16	68
Sub-Saharan Africa	1960-1965	6.8	1985	15	76
Africa	1960-1965	6.87	1980	18	68
Eastern Africa	1965-1970	7.03	1985	15	75
Middle Africa	1980-1985	6.63	—[b]	—	91
Northern Africa	1960-1965	7.06	1970	22	41
Southern Africa	1955-1960	6.46	1960	18	42
Western Africa	1970-1975	7.03	1990	19	75

Major area or region	*Period of maximum fertility*	*Maximum fertility (children per woman)*	*Onset of fertility decline*[a]	*Percentage fertility decline within 15 years of onset*	*Fertility in 2005-2010 as percentage of maximum*
Asia	1950-1955	5.87	1965	35	40
Eastern Asia	1950-1955	5.67	1965	54	30
South-central Asia	1955-1960	6.06	1970	18	48
South-eastern Asia	1960-1965	6.19	1970	35	38
Western Asia	1950-1955	6.49	1965	16	46
Latin America and the Caribbean	1960-1965	5.97	1965	29	40
Caribbean	1960-1965	5.49	1965	33	44
Central America	1955-1960	6.82	1970	39	36
South America	1960-1965	5.77	1965	28	40
Oceania	1955-1960	4.09	1960	31	56
Australia/New Zealand	1955-1960	3.53	1960	41	52
Melanesia	1955-1960	6.33	1970	18	57
Micronesia	1960-1965	6.51	1965	27	41
Polynesia	1960-1965	6.97	1965	29	44

Source: *World Population Prospects: The 2006 Revision.*

[a] Onset of fertility decline is the period after which total fertility falls permanently below 90 per cent of its maximum level.

[b] No decline yet identified.

12. The speed of the decline has also varied. Eastern and South-eastern Asia, the Caribbean and Central America registered a rapid reduction in fertility, with a drop of at least 30 per cent occurring within 15 years of the onset of the decline. In Eastern, Southern and Western Africa, South-central and Western Asia and Melanesia, fertility has declined very slowly, dropping by less than 20 per cent within 15 years of the onset of the decline. The 42 countries having fertility levels above 4.0 children per woman in 2005-2010 are mostly located in those regions or in Middle Africa, where there has as yet been no decline in fertility. The remaining world regions have experienced fertility reductions that are neither too fast nor too slow.

13. High fertility levels, unless accompanied by high mortality, result in rapid population growth, which is particularly onerous for low-income countries. Hence, more than half of the developing countries have policies to lower fertility; of the least developed countries, 76 per cent have such policies.

14. Policies to increase the availability of contraceptives and accessibility to family planning programmes and reproductive health care have been instrumental in facilitating reductions in fertility. More than 90 per cent of Governments provide direct or indirect support for family planning programmes. Globally, contraceptive prevalence among women between the ages of 15 and 49 who are married or in union increased from 56 per cent in 1993 to 63 per cent in 2003 (see table 4). In 44 per cent of the developing countries with relevant data, contraceptive prevalence increased annually by at least one percentage point per year during the most recent period covered by their respective estimates, while in 8 per cent the increase

averaged at least two percentage points per year. However, contraceptive prevalence remains low in countries with high fertility, most of which are located in sub-Saharan Africa, where contraceptive prevalence averages a low 22 per cent.

Table 4
Contraceptive use worldwide and by development group and major area, most recent date available

(Percentage)

			Any modern method				
Major area	*Year*	*Any method*	*Total*	*Female sterilization*	*Intra-uterine device*	*Oral contraceptive pill*	*Any traditional method*
World	2003	63.1	56.1	19.7	15.5	8.5	7.0
More developed regions	1999	67.4	56.1	8.6	9.4	16.5	11.3
Less developed regions	2004	62.4	56.1	21.5	16.5	7.2	6.3
Africa	2003	28.0	21.4	1.6	4.2	7.4	6.5
Asia	2004	67.9	61.7	24.0	19.6	6.1	6.3
Europe	1997	67.5	52.5	4.7	14.1	18.6	14.9
Latin America and the Caribbean	2001	71.4	64.5	28.5	7.4	15.8	6.9
Northern America	2001	73.0	68.6	22.2	1.9	17.9	4.3
Oceania	1995	52.9	48.9	11.3	1.5	17.7	4.1

Source: World Contraceptive Use 2007.

15. A total of 90 per cent of all contraceptive users rely on modern methods (see table 4). The three most commonly used modern methods are female sterilization (20 per cent), the intra-uterine device (16 per cent) and the oral contraceptive pill (9 per cent). They account for 69 per cent of overall contraceptive prevalence. In contrast, traditional methods are used by 7 per cent of women who are married or in union, the most commonly used being the rhythm method (periodic abstinence) and withdrawal.

16. Very low fertility levels that are not sufficient to ensure the replacement of generations are a matter of concern in many countries. In 2005-2010, 86 countries or areas, including 53 developed countries, had below-replacement fertility. In all, 60 per cent of developed countries consider their fertility levels to be too low, up from 40 per cent in 1995. Among the 47 countries that consider their fertility to be too low, 27 are in Europe and 12 are in Asia.

IV. Mortality trends and the impact of HIV/AIDS

17. Better hygiene, improved nutrition and scientifically based medical practices resulted in major reductions in mortality during the twentieth century. By 1950-1955, the more developed regions, which benefited first from such advances, had a life expectancy at birth of 66 years, which has since increased to 77 years (see table 5).

18. The 1950s marked an important turning point: with the increasing use of antibiotics, vaccines and insecticides, mortality in developing countries declined rapidly and life expectancy increased from 41 years in the period 1950-1955 to 65 years in 2005-2010. Hence, the difference in life expectancy between developed and developing countries narrowed, from 25 years in 1950-1955 to 12 years in 2005-2010. However, lagging mortality decline in the least developed countries, where life expectancy rose from 36 years in 1950-1955 to just 55 years in 2005-2010, has increased the gap between them and other developing countries from 5 to 13 years. Such divergence is the result partly of the exceptionally rapid increase in life expectancy achieved by Asia and Latin America and the Caribbean (see table 5) and partly of high HIV prevalence, failure to control endemic tropical diseases, including malaria, and the effects of protracted conflict in many least developed countries, particularly those in Africa.

Table 5
Life expectancy at birth for both sexes combined, by major area, selected periods

	Life expectancy at birth (years)				*Average annual increase (years)*		
Major area	*1950-1955*	*1990-1995*	*2005-2010*	*2045-2050*	*1950-1955 to 1990-1995*	*1990-1995 to 2005-2010*	*2005-2010 to 2045-2050*
World	46.4	64.2	67.2	75.4	0.4	0.2	0.2
More developed regions	66.1	74.0	76.5	82.4	0.2	0.2	0.1
Less developed regions	40.8	62.0	65.4	74.3	0.5	0.2	0.2
Least developed countries	36.2	50.4	54.6	67.2	0.4	0.3	0.3
Other less developed countries	41.5	64.2	67.9	76.4	0.6	0.2	0.2
Africa	38.5	51.9	52.8	66.1	0.3	0.1	0.3
Asia	41.0	64.5	69.0	77.4	0.6	0.3	0.2
Europe	65.6	72.6	74.6	81.0	0.2	0.1	0.2
Latin America and the Caribbean	51.4	68.6	73.3	79.6	0.4	0.3	0.2
Northern America	68.8	75.5	78.5	83.3	0.2	0.2	0.1
Oceania	60.4	72.3	75.2	81.0	0.3	0.2	0.1

Source: World Population Prospects: The 2006 Revision.

19. The emergence of HIV and the resulting worldwide pandemic have increased mortality in the countries most affected by the disease. In 2007, an estimated 33 million people were living with HIV, 90 per cent of whom lived in developing countries and two thirds of whom lived in sub-Saharan Africa.[6] Although other parts of the world have avoided the devastating spread of the disease as it has affected Africa, rapid and effective responses are required to avert similar developments. The impact of HIV/AIDS is the major population concern of Governments worldwide: 93 per cent of developing countries and 81 per cent of developed countries consider it a major challenge.

[6] Joint United Nations Programme on HIV/AIDS, *Report on the global HIV/AIDS epidemic* (UNAIDS/08.25E/JC1510E) (Geneva, 2008).

20. Despite the impact of HIV/AIDS, life expectancy is projected to increase in most regions and to reach unprecedented levels by 2045-2050: 75 years globally, and higher in all major areas except Africa. While the life expectancy figures for most major areas are expected to converge, those for the least developed countries will lag behind. Moreover, given the setbacks experienced recently in many countries, it is not certain that projected improvements in survivorship will be achieved. The resurgence of communicable diseases or the problems associated with coping with a rising chronic disease burden among the ageing populations of developing countries may prevent the realization of projected gains in longevity.

21. Disparities in survivorship by sex continue to exist, the result of a complex interplay of biological, medical and behavioural factors that determine mortality at different ages.[7] In populations with low mortality, females generally experience lower mortality rates than males at all ages. However, in some developing countries and in developed countries in the past, females have experienced higher mortality than males at some ages, particularly in childhood or early adulthood.[8] Generally, female infants experience lower mortality than male infants during the neonatal period because males are more susceptible to deadly perinatal conditions, congenital anomalies and infectious disease in the early months of life.[9] In adulthood, a combination of behavioural factors, such as smoking, use of alcohol or engagement in risky behaviours, and biological factors, such as the protective effect of female sex hormones, result in lower mortality among females than among males. Women also have a lower risk of developing cardiovascular disease during their reproductive years and, although this female advantage decreases with advancing age, women still experience lower mortality risks than men at advanced ages.[10]

22. In most countries today, females have a higher life expectancy than males. Globally, newborn girls can expect to live 69.5 years at 2005-2010 mortality rates, compared with 65 years for boys. Between the periods 1950-1955 and 2005-2010, the difference between female and male life expectancy increased from 2.7 years to 4.5 years. This increasing female advantage in survivorship results from a faster improvement in female life expectancy compared with that of males in Asia,

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[7] "Sex differentials in survivorship in the developing world: levels, regional patterns and demographic determinants", *Population Bulletin of the United Nations*, No. 25 (United Nations publication, Sales No. E.88.XIII.6), pp. 51-64; Ingrid Waldron, "Mortality differentials, by sex", *The Encyclopedia of Population*, P. Demeny and G. McNicoll (eds.) (New York, Macmillan, 2003).

[8] D. Tabutin and M. Willems (1995), "Excess female child mortality in the developing world during the 1970s and 1980s", *Population Bulletin of the United Nations*, No. 39 (United Nations publication, Sales No. E.95.XIII.17), pp. 45-78; D. Tabutin (1998), "Differential mortality by sex from birth to adolescence: the historical experience of the West (1750-1930)", *Too Young to Die: Genes or Gender?* (United Nations publication, Sales No. E.98.XIII.13); United Nations, "Patterns of sex differentials in mortality in less developed countries", *Sex differentials in mortality: trends, determinants and consequences*, A. Lopez and L. Ruzicka (eds.) (Canberra, Australian National University, 1983).

[9] Ingrid Waldron (1998), "Sex differences in infant and early childhood mortality: major causes of death and possible biological causes", *Too Young to Die: Genes or Gender?* (United Nations publication, Sales No. E.98.XIII.13).

[10] Thomas Buettner (1995), "Sex differentials in old-age mortality", *Population Bulletin of the United Nations*, No. 39 (United Nations publication, Sales No. E.95.XIII.17), pp. 18-44; V. Kannisto, J. Lauritsen, A. R. Thatcher and J. W. Vaupel (1994), "Reductions in mortality at advanced ages: several decades of evidence from 27 countries", *Population and Development Review*, vol. 20, No. 4, pp. 793-810.

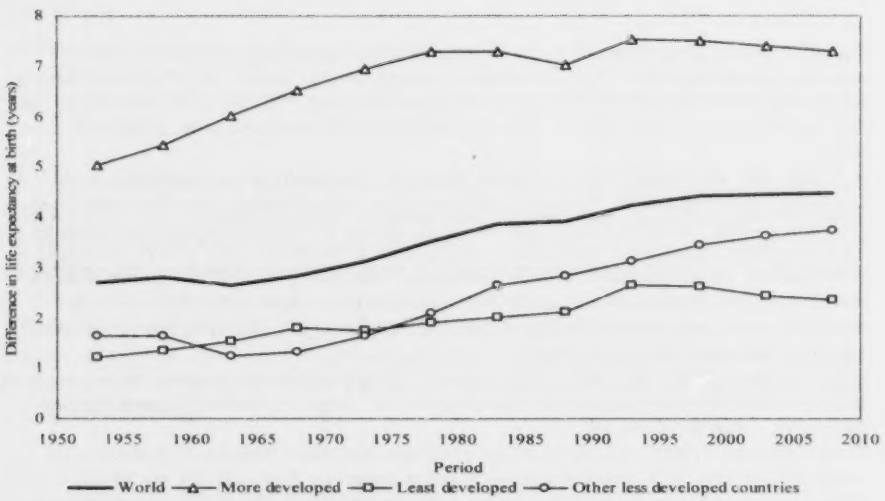
Europe, Latin America and the Caribbean, and Oceania. In Africa and Northern America, the female advantage in survivorship declined (see table 6 and fig. I).

Table 6
Life expectancy at birth by sex and possibility of survival, by major area, selected periods

	Life expectancy at birth (years)						*Probability of survival (percentage)*	
	1950-1955			*2005-2010*			*2005-2010*	
Major area	*Female*	*Male*	*Difference*	*Female*	*Male*	*Difference*	*From 15 to 60*	*From 60 to 80*
World	47.8	45.0	2.7	69.5	65.0	4.5	82.2	49.7
More developed regions	68.6	63.5	5.0	80.2	72.9	7.3	88.0	56.8
Less developed regions	41.6	40.0	1.6	67.2	63.7	3.5	80.8	45.4
Least developed countries	36.8	35.6	1.2	55.8	53.4	2.4	68.3	33.2
Other less developed countries	42.3	40.7	1.6	69.8	66.1	3.7	82.6	46.4
Africa	39.7	37.3	2.4	53.8	51.7	2.1	63.9	33.2
Asia	41.7	40.7	1.3	71.0	67.2	3.8	84.2	47.6
Europe	67.9	62.9	5.0	78.8	70.5	8.3	85.8	52.2
Latin America and the Caribbean	53.1	49.7	3.4	76.6	70.1	6.5	85.1	54.6
Northern America	71.9	66.1	5.8	81.0	75.9	5.1	90.5	60.6
Oceania	62.9	58.1	4.9	77.9	72.6	5.3	88.6	61.5

Source: World Population Prospects: The 2006 Revision.

Figure I
Difference between female and male life expectancy by development group, 1950-2010



Source: World Population Prospects: The 2006 Revision.

23. In the more developed regions, the female advantage in life expectancy increased from 5 years in the period 1950-1955 to 7.3 years in 2005-2010. That outcome is the result mainly of a marked increase in female life expectancy in Europe with respect to that of males (from 5 to 8.3 years), which, in turn, is largely determined by the increasing survivorship advantage of females in Eastern Europe, where male mortality has stagnated or even increased since 1980. In sharp contrast with Europe, the female advantage in life expectancy declined in Northern America from 5.8 to 5.1 years between the periods 1950-1955 and 2005-2010.

24. Among the less developed regions, Latin America and the Caribbean displays relatively high levels of life expectancy, with large differentials by gender, amounting to 6.5 years in favour of females in 2005-2010. In Africa and Asia, the sex differentials in life expectancy are substantially lower, at 2.1 years in Africa and 3.8 years in Asia. In Africa, the female advantage declined by more than a year between the periods 1990-1995 and 2005-2010, largely because of the HIV/AIDS epidemic, which has affected women more than men, at increasingly younger ages. In Asia, the female advantage in life expectancy increased, rising from a very low level in the 1950s. Prior to 2000-2005, the female advantage in life expectancy was higher in Africa than in Asia.

25. Because differences in life expectancy are still high between developed and developing countries, the views of Governments about the adequacy of mortality levels vary considerably between the development groups. In 2007, 63 per cent of the developed countries considered the life expectancy of their population to be acceptable, whereas just 36 per cent of developing countries did so and none of the least developed countries did.

26. In many countries, some segments of the population, particularly infants and children under the age of 5, continue to experience unacceptably high levels of mortality, requiring special policy attention. In 2007, 35 per cent of developed countries considered their levels of under-5 mortality to be unacceptable, whereas 86 per cent of developing countries did so, including all the least developed countries.

27. Reductions in child mortality have been major contributors to the rise of life expectancy at the global level. Worldwide, under-5 mortality is estimated to have fallen by 19 per cent between the periods 1990-1995 and 2005-2010, from 91 to 74 deaths per 1,000 live births. In 2005-2010, the probability of dying between birth and the age of 5 in the less developed regions was estimated at 81 deaths per 1,000 births — a level nine times higher than that in the more developed regions, where under-5 mortality was estimated at 9 deaths per 1,000 (see table 7). Under-5 mortality is particularly high in the least developed countries, at 141 deaths per 1,000 births — a level more than twice as high as that in the rest of the developing world (62 deaths per 1,000). Among the less developed regions, Latin America and the Caribbean recorded the sharpest decline in under-5 mortality between the periods 1990-1995 and 2005-2010, with a 45 per cent reduction. Under-5 mortality in Asia declined by 28 per cent over the same period, whereas in Africa it dropped by just 16 per cent.

Table 7
Under-5 mortality for both sexes combined, by major area, 1950-1995 and 2005-2010

Major area	*Under-5 mortality (per 1,000 live births)*		*Difference*	*Difference as percentage of 1990-1995*
	1990-1995	*2005-2010*		
World	91	74	17	19
More developed regions	12	9	4	29
Less developed regions	100	81	19	19
Least developed countries	179	141	39	22
Other less developed countries	81	62	19	24
Africa	170	143	27	16
Asia	83	59	23	28
Europe	15	10	5	31
Latin America and the Caribbean	49	27	22	45
Northern America	9	8	2	19
Oceania	41	35	6	14

Source: World Population Prospects: The 2006 Revision.

28. The probability of surviving in adulthood from exact age 15 to exact age 60 is a useful indicator of the burden of disease in a population, because most deaths at those ages are preventable. At current mortality levels, 82 per cent of all 15-year-olds would survive to age 60 (see table 6). Survivorship between 15 and 60 is higher in the more developed regions (88 per cent), whereas in the least developed countries it is only 68 per cent and in the rest of the developing world it is 83 per cent.

29. Estimated levels of adult survivorship are particularly high in Oceania (89 per cent), mainly because 15-year-olds in Australia and New Zealand have a 94 per cent probability of reaching the age of 60, and in Northern America (91 per cent). Asia, Europe and Latin America and the Caribbean have very similar levels of adult survivorship, ranging from 84 per cent to 86 per cent. The relatively low level of adult survivorship in Europe is largely the result of high adult mortality in Eastern Europe, where just 77 per cent of 15-year-olds are expected to reach their sixtieth birthday at current mortality levels. Adult survivorship is lowest in Africa, at 64 per cent, mainly because of the HIV/AIDS epidemic.

30. The probability of surviving from exact age 60 to exact age 80 at current mortality levels is 50 per cent globally (see table 6), but there are major differences in old-age survivorship between developed and developing countries. In developed countries, 57 per cent of 60-year-olds would survive to the age of 80 at current mortality levels, whereas in developing countries, just 45 per cent would do so. Survivorship at advanced ages is lowest among the least developed countries (33 per cent). Among the major areas, the chances of survival in old age are highest in Oceania and Northern America (over 60 per cent in each), followed by Latin America and the Caribbean (55 per cent) and Europe (52 per cent). Again, low old-age survival probabilities in Europe are the result of high old-age mortality in

Eastern Europe. In Asia, the probability of survival in old age, 48 per cent, is distinctly lower than in other major areas, and, at 33 per cent, Africa has the lowest probability.

31. Maternal mortality remains high in many developing countries and only 17 per cent of countries consider their maternal mortality levels to be acceptable. In 2005, an estimated 450 women died in developing countries for every 100,000 births, whereas the equivalent figure in developed countries was a low 11 deaths per 100,000 births and, in the least developed countries, a staggering 870.[11] Virtually all of the least developed countries consider their high maternal mortality to be unacceptable and may not be able to achieve the reductions called for in the Millennium Development Goals.

V. International migration

32. The number of international migrants,[12] which stood at 192 million in 2005, is expected to reach 210 million in 2010, still representing 3 per cent of the world population. It is projected that about 128 million international migrants, or 61 per cent, will reside in developed countries, whereas 82 million, or 39 per cent, will live in developing countries (see table 8). International migrants will account for about 10 per cent of the population of developed countries, but for just 1.4 per cent of that of developing countries in 2010. Europe is expected to host the highest share of international migrants (33 per cent), followed by Asia (28 per cent), Northern America (24 per cent), Africa (9 per cent), Latin America and the Caribbean and Oceania (3 per cent each). High-income countries are expected to host 62 per cent of all international migrants.

Table 8
Estimated number of international migrants and their percentage distribution by major area, 1990-2010

	Number of international migrants (millions)		*Increment (millions)*	*Percentage distribution*		*Percentage of female migrants*	
Major area	*1990*	*2010*	*1990-2010*	*1990*	*2010*	*1990*	*2010*
World	155	210	55	100	100	49	49
More developed regions	82	128	46	53	61	52	52
Less developed regions	73	82	9	47	39	45	45
Least developed countries	11	12	1	7	6	47	48
Africa	16	19	3	10	9	46	48
Asia	50	58	8	32	28	45	44
Latin America and the Caribbean	7	7	0	5	3	50	50
Northern America	28	50	22	18	24	51	50
Europe	49	70	20	32	33	53	53
Oceania	4	6	2	3	3	49	51

Source: Trends in Total Migrant Stock: The 2008 Revision.

[11] *Maternal mortality in 2005*; estimates developed by WHO, UNICEF, UNFPA and the World Bank (Geneva: World Health Organization, 2007).

[12] International migrants are persons born in a country other than that in which they reside.

33. Between 1990 and 2010, the number of international migrants is expected to increase by 55 million, from 155 million to 210 million. Some 83 per cent of those 55 million, or 46 million migrants, are expected to be added to the migrant population of developed countries, while developing countries as a whole will gain just 9 million migrants. High-income countries are expected to gain 46 million international migrants during that period, whereas the middle- and low-income countries are expected to see a very modest increase or even a decrease in their migrant stock.

34. In 1990, 30 countries hosted 75 per cent of all international migrants, and by 2010, 27 are expected to do so. The United States will account for 20 per cent of all international migrants in 2010, followed by the Russian Federation (6 per cent), Germany (5 per cent), Canada (3 per cent) and Saudi Arabia (3 per cent). Between 1990 and 2010, nine receiving countries will absorb 83 per cent of the increase in the migrant stock, with the United States gaining about 20 million migrants, Spain gaining about 6 million and Germany gaining nearly 5 million.

35. By 2010, migrants will constitute at least one fifth of the population of 47 countries, including Australia, Canada and Saudi Arabia, and of 34 other countries with fewer than a million inhabitants each (see fig. II). A high proportion of international migrants characterize the States members of the Gulf Cooperation Council; Hong Kong and Macao, Special Administrative Regions of China; Israel; Jordan; Singapore; and several small countries in Europe.

Figure II
Map showing the number of international migrants as a percentage of the population, 2010

Source: Trends in Total Migrant Stock: The 2008 Revision.

36. The proportion of female international migrants, which reached 49 per cent in 1990, is expected to remain at that level until 2010. In developed countries, female migrants have outnumbered male migrants since 1985 and their proportion is expected to remain at 52 per cent in 2010. In contrast, female migrants remain underrepresented in Asia, largely because the major receiving countries in Western

and South-eastern Asia are the destination of significant numbers of contract workers, most of whom are men.

37. In the more developed regions, net migration became the driving force of population growth in 1995-2000. However, a projected net annual intake averaging 2.3 million migrants will not prevent the population of those regions from decreasing, although the decline will likely start only after 2030. The slow growth of the working age population coupled with sustained economic growth in many developed countries has led to sector-specific labour shortages that have been increasingly filled by migrant workers. Government views on the adequacy of immigration levels indicate that, since 1995 or thereabouts, developed countries have become more open to the possibility of using migration to address labour shortages. In 2005, fewer than 10 per cent of developed countries had policies to lower immigration and nearly half wanted to increase the immigration of highly skilled workers.

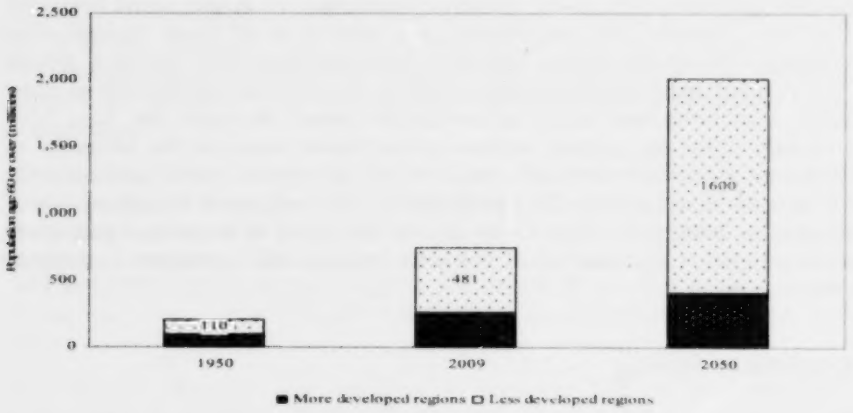
VI. Population ageing

38. Smaller families and longer life spans are shifting the age distribution of the world population from younger to older. In 1950, only 8 per cent of the world population was aged 60 years or over. By 2009, that proportion had risen to 11 per cent, and it is expected to reach 22 per cent in 2050. Globally, the number of persons aged 60 or over is expected almost to triple, from 743 million in 2009 to 2 billion in 2050. By that date, the number of older persons will exceed the number of children under the age of 15.

39. Population ageing is more advanced in the more developed regions, where the proportion of older persons is estimated at 21 per cent for 2009 and the number of older persons already exceeds by a wide margin the number of children under the age of 15. By 2050, the proportion of older persons in the more developed regions is likely to reach 33 per cent, more than double the expected proportion of children (15 per cent).

40. Although the process of population ageing is less advanced in the less developed regions, it is occurring at a faster pace than in Europe, given the rapid reduction of the overall fertility level in those regions. The proportion of older persons in the less developed regions is expected to increase from 9 per cent in 2009 to 20 per cent in 2050. Despite the fact that the proportion of older persons in those regions is lower, developing countries are already home to more older persons than developed countries, and it is projected that in 2050, 80 per cent of all older persons will live in developing countries. Between 2009 and 2050, the older population of those countries is projected to increase from 481 million to 1.6 billion (fig. II), while that of developed countries is expected to rise from 262 million to 406 million.

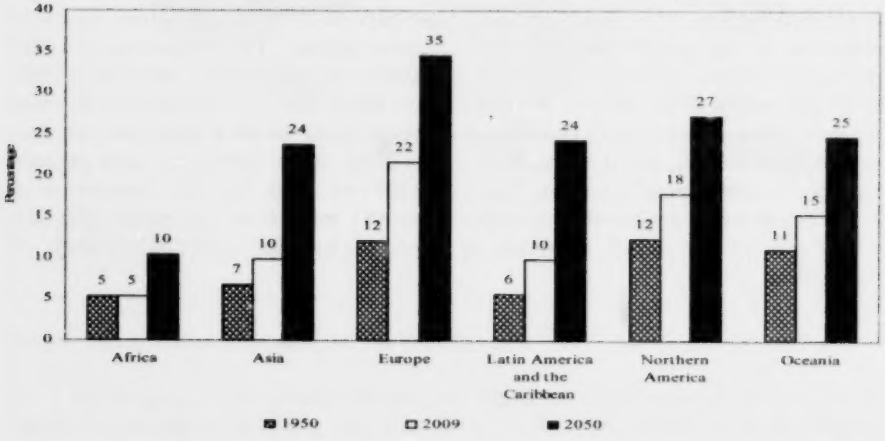
Figure III
Size and distribution of the population aged 60 or over, by development group, 1950, 2009 and 2050



Source: World Population Prospects: The 2006 Revision

41. Europe will continue to have the highest proportion of older persons: 22 per cent in 2009 and 35 per cent in 2050. In contrast, only 10 per cent of the population of Africa is expected to be aged 60 or over by 2050, up from 5 per cent in 2009. The fastest growth in the proportion of older persons is projected to take place in both Asia and Latin America and the Caribbean, where older persons will constitute 24 per cent of the total population in 2050, up from 10 per cent in 2009 (fig. IV).

Figure IV
Percentage of the population aged 60 or over, by major area, 1950, 2009 and 2050



Source: World Population Prospects: The 2006 Revision

42. In most countries, longevity is increasing. Global life expectancy at age 60 rose from 15 years in 1950-1955 to 20 years in 2005-2010, and it is expected to reach 23 years in 2045-2050. As a result, the older population is itself ageing, and persons aged 80 or over, who constitute 1.5 per cent of the world population today, are expected to account for 4.4 per cent in 2050.

43. Population ageing poses challenges to the financial sustainability of pension systems based on the redistribution of earnings from younger to older generations and of health-care systems.[13] In developing countries, an estimated 342 million older persons currently lack adequate incomes, and their number may rise to 1.2 billion in 2050 if the coverage of pension schemes does not expand. Since women constitute the majority of the older population and have lower labour force participation than men, they are particularly likely to be poor in old age. Consequently, policies aimed at providing a safety net for older persons need to focus on older women in particular.[14]

44. Population ageing brings important benefits, especially during the four or five decades when the proportion of children declines and that of older persons increases slowly. If the population of working age can be productively employed during that period, more resources can be available for investment and to spur economic growth. In Asia and Latin America and the Caribbean, the total dependency ratio declined between 1975 and 2005 and will likely start increasing in 2010 in Asia and in 2025 in Latin America and the Caribbean. In Africa, where fertility remains high, the dependency ratio has not yet begun to decline. In the more developed regions, where population ageing is advanced, the dependency ratio is expected almost to triple between 2009 and 2050.

45. Given that women with fewer children are more likely to work, with investment in health and education increasing and people saving more for a longer retirement, population ageing can produce additional and permanent increases in per capita income and economic growth. However, those outcomes depend on developing appropriate institutions and adopting policies that foster the accumulation of human and physical capital.

VII. Urbanization

46. In 2008, for the first time in history, the number of urban dwellers surpassed the number of rural inhabitants. World urbanization is expected to continue at a fast pace in many developing countries, yielding by 2050 a world population that will likely be 70 per cent urban. Between 2007 and 2050, the number of urban dwellers is projected to increase by 3.1 billion, from 3.3 billion to 6.4 billion, while the world population will gain 2.5 billion persons. The difference represents a net population transfer from rural to urban areas as a result of migration and the transformation of rural localities into urban centres, usually described as "reclassification".

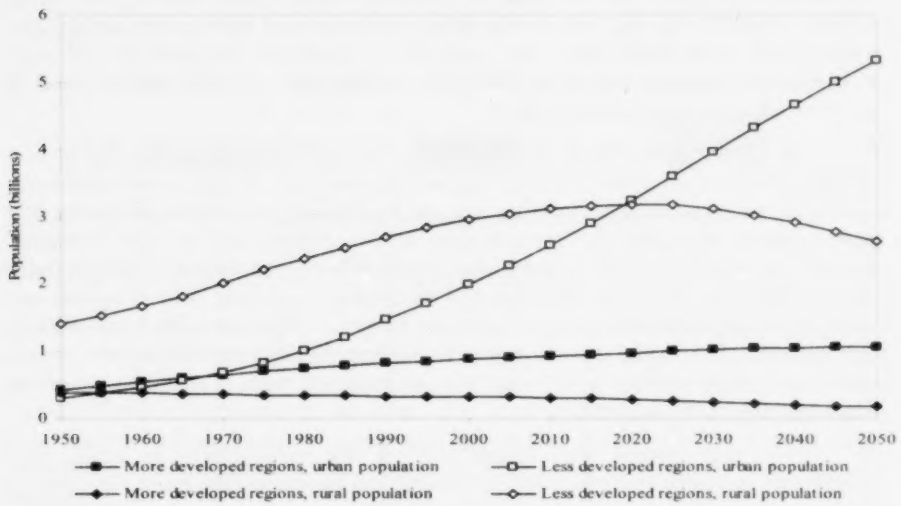
47. Future population growth will be largely concentrated in the cities and towns of developing countries. The urban population of developing countries is projected

[13] *World Economic and Social Survey 2007: Development in an Ageing World* (United Nations publication, Sales No. E.07.II.C.1).

[14] See International Labour Organization (2002), *Facts on Social Security*; available at http://www.ilo.org/public/english/protection/secsoc/downloads/events/factsheet.pdf.

to increase by 2.9 billion, from 2.4 billion in 2007 to 5.3 billion in 2050 (fig. V), whereas the urban population of developed countries will likely rise from 0.9 billion in 2007 to just 1.1 billion in 2050. Between 2007 and 2050, the urban proportion of the population of developing countries is projected to increase from 44 per cent to 67 per cent, while that of developed countries will likely rise from 74 per cent to 86 per cent.

Figure V
Urban and rural populations by development group, 1950-2050



Source: World Urbanization Prospects: The 2007 Revision, Highlights.

48. In 2007, the two least urbanized major areas were Africa (39 per cent urban) and Asia (41 per cent). Latin America and the Caribbean, where 78 per cent of the population was urban in 2007, was more urbanized than Europe (72 per cent). Over the coming decades, Africa and Asia are expected to urbanize rapidly and account for 80 per cent of the urban population increase in developing countries. Nevertheless, by 2050, they will still have considerably lower levels of urbanization than other major areas.

49. The world urban population is highly concentrated in a few countries. In 2007, 25 countries accounted for three quarters of all urban dwellers, with urban populations ranging from 29 million in South Africa to 561 million in China. Most of those 25 countries are highly urbanized, but 7 have urbanization levels ranging from 27 per cent to just over 50 per cent, including the populous countries of Bangladesh, China, India, Indonesia, Nigeria and Pakistan.

50. In many developing countries, natural increase (the number of births minus the number of deaths) accounts for at least 60 per cent of urban population growth, with internal migration and reclassification accounting for the rest. Notable exceptions include China and India, where rural-to-urban migration and reclassification have accounted for up to 80 per cent of urban population growth since 1980. Hence, for

many of the developing countries concerned about rapid urban growth, policies that facilitate the reduction of fertility are a means of moderating urban growth.

51. In contrast to the urban population, the world rural population is expected to decline after reaching a maximum of 3.5 billion in 2018 (fig. V). This global trend is mainly the result of rural population growth in developing countries, where the rural population is projected to reach 2.6 billion in 2050. In developed countries, the rural population has been declining since 1950 and is expected to drop from 0.3 billion in 2007 to 0.2 billion in 2050.

52. For many years, Governments have expressed concern about the spatial distribution of their populations and have focused on reducing rural-to-urban migration, controlling urban sprawl or moderating the growth of primate cities by encouraging the economic development of small and medium-sized cities and by creating regional development zones. Although those measures have not always resulted in slower urbanization, they have shown that the proactive management of urbanization and its consequences is preferable to restrictive policies that go against the economic and social forces shaping population distribution.

VIII. Conclusions

53. **In mid-2009 the world will have 6.8 billion inhabitants. If fertility continues to decline in developing countries, the world population is expected to reach 7 billion in 2012 and 9 billion in 2045. Most of that growth will occur in developing countries. While the population of the least developed countries will more than double, that of some developed countries is already declining, and the overall population of developed countries is expected to start decreasing around 2030.**

54. **Total fertility in the less developed regions dropped from 6.0 to 2.8 children per woman between the periods 1965-1970 and 2005-2010. Yet in 2005-2010, 42 developing countries, many of them least developed, still had total fertility levels above 4.0 children per woman, which resulted in rapid population growth. Concerned about their high population growth, three quarters of the least developed countries adopted policies to reduce fertility.**

55. **Global contraceptive prevalence has continued to increase, rising from 56 per cent in 1993 to 63 per cent in 2003. In 44 per cent of the developing countries with the required data, contraceptive prevalence has risen by more than one percentage point per year since 1997, while 8 per cent of such countries recorded increases averaging at least two percentage points annually. However, contraceptive prevalence remained very low in most of the least developed countries and in Africa (28 per cent).**

56. **In 86 countries or areas, including 53 developed countries, fertility levels are below that needed to ensure the replacement of generations. If sustained, such low fertility will result in declining populations. Because of prevailing low fertility, international migration accounted for 75 per cent of population growth in the more developed regions in 2000-2005 and, if current trends continue, net migration will account for virtually all the population growth in those regions from 2010 to 2030. Thereafter, even with a projected net**

migration gain averaging 2.3 million migrants annually, their population is expected to decline.

57. Life expectancy in 2005-2010 is estimated at 67.2 years globally, resulting from a life expectancy of 76.5 years in the more developed regions and 65.4 years in the less developed regions. The least developed countries, two thirds of which are severely affected by the HIV/AIDS epidemic, have a low life expectancy of 54.6 years. Despite the expected reductions in future mortality levels, the survivorship gap between the least developed countries and the rest of the developing world will remain significant. Moreover, given the setbacks that many developing countries have experienced recently, the projected improvements in survivorship may not be achieved.

58. Fertility decline coupled with increasing longevity produces population ageing. In 2050, the population aged 60 or over is expected to account for 22 per cent of the world population, up from 11 per cent today. Globally, the number of persons aged 60 or over will almost triple, from 743 million in 2009 to 2 billion in 2050, when their number will exceed that of children under 15 for the first time in history.

59. Population ageing is more advanced in developed countries, where 21 per cent of the population is already aged 60 or over. Compared with the developed countries, the developing world is still relatively young. Thus, children constitute 30 per cent of the population of developing countries and older persons constitute just 9 per cent. However, because of the fast decline in fertility in developing countries as a whole, their population is expected to age rapidly and by 2050 will resemble that of developed countries today.

60. The ratio of the population aged 60 or over to that of working age is an indicator of the potential economic burden that older generations impose on younger ones. In developed countries that ratio will almost double, increasing from 34 persons aged 60 or over per 100 persons of working age in 2009 to 62 in 2050. In developing countries, the ratio will nearly triple, increasing from 14 to 34.

61. In 2008, the number of urban dwellers surpassed that of rural inhabitants for the first time in history. The world urban population, which reached 3.4 billion in 2005, is expected to increase to 6.4 billion by 2050, and most of the expected population growth will be concentrated in the urban areas of developing countries. By 2050, 70 per cent of the world population will likely be urban. Between 2007 and 2050, the urban proportion of the population of developing countries is projected to increase from 44 per cent to 67 per cent, while that of developed countries will likely rise from 74 per cent to 86 per cent.